

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 62-256112

(43)Date of publication of application : 07.11.1987

(51)Int.Cl.

G05D 23/00
F24D 17/00

(21)Application number : 61-099642

(71)Applicant : MATSUSHITA ELECTRIC IND
CO LTD

(22)Date of filing : 30.04.1986

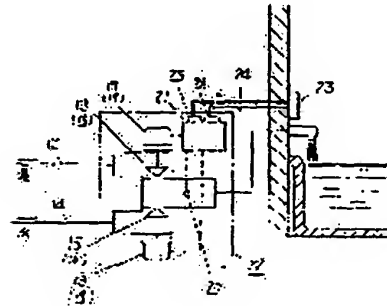
(72)Inventor : KIDOUCHI YASUO
YONEKUBO HIROAKI

(54) HOT AND COLD WATER MIXER

(57)Abstract:

PURPOSE: To permit a safe use of a mixer even in a damp place such as a bathroom by constituting the apparatus in such a way that a mixing valve unit and a setter are connected through an optical fiber and the setter is electrically insulated.

CONSTITUTION: The setter 2 to set the desired temperature of mixed waters is provided, and a controller 21 in the mixing valve unit 22 and the setter 23 are connected through the optical fiber 24. The controller 21 has a light emitting unit 25 and a light receiving unit 26, and the former transmits an optical signal to the setter 23 through the optical fiber 24 from the latter. The setter 23 mechanically modulates the optical signal, and the light receiving unit 26 of the controller 21 receives the modulated optical signal. The controller 21 responds to the temperature set by the setter 23, compares it with the signal of a thermister 20, controls a mixing valve drive device 19 according to the deviation, and obtains the mixed waters at a desired temperature. The mixing valve unit 22 and the setter 23 in a bathroom are so constituted to be connected through the optical fiber 24. Since the setter 23 is electrically insulated, it can be safely used in the humid bathroom.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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